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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Siegfried Bruenle

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7590

07/25/2006

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EXAMINER

DAVIS, CYNTHIA L

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	Application No.		Applicant(s)	
	09/857,821		BRUENLE ET AL.	
	Examiner		Art Unit	
	Cynthia L. Davis		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/1/2005.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 17, 20, 22 and 32 have been considered but are moot in view of the new ground(s) of rejection in view of the Struhsaker (6115370) reference.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 17, 18, 21, 26, 31, and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Sereno in view of Struhsaker.

Regarding claims 17 and 32: Sereno discloses a method and a telecommunications system, comprising:

- a) a base station in figure 1, and column 3, lines 47-53;
- b) at least one base station-router (see figure. 1, and column 3, lines 47-53, Radio Network Control Center WAC means base station-router) allocated to the base station;
- c) several subscriber stations (see figure 1, and column, lines 47-53, Mobile stations M1 means subscriber stations) with respective subscriber station-routers (see figure 1, and column 4, line 1 7-27, the combining of UC1, CV1, and CS1 means subscriber station router) connected via a connection network at variable transmission rates with the base station, for creating a telecommunication link (see figure 1, and column 4, lines 45-48, logical connection 16 means a connection network, and column 4 line 35-37) with said at least one base station-router; and

d) said at least one base station-router being operative for controlling the variable transmission rate (see figure 1, and column 5, lines 48-55) allocated to each telecommunication link between the base station and each subscriber station. That the variable transmission rate is dynamically controlled and concentrated, and dynamically allocated, is missing from Sereno. However, Struhsaker discloses dynamic allocation in column 9, lines 18-24, and concentration in column 24, lines 28-33. It would have been obvious to one skilled in the art at the time of the invention to dynamically allocate and concentrate the transmissions of the system of Sereno. The motivation would be to provide more and better service (Struhsaker, column 9, lines 22-25) and to make a commercially viable WLL (Struhsaker, column 24, lines 28-31).

Regarding claim 18: Sereno further disclosed the telecommunication system according to claim 17, wherein said at least one base station-router dials a respective subscriber station- router to create a connection between the base station and the respective subscriber station (see figure 1, and col. 4 line 27-48.).

Regarding claim 21: Sereno further disclosed the telecommunication system according to claim 18, wherein the base station has a separate interface for speech communication (see figure 1, and column 5, line 64-67, Speech coder (CV2) have input (18) and output (1') that means interface for speech communication).

Regarding claim 26: Sereno further disclosed the telecommunication system according to claim 17, wherein data is transmitted between the base station and each subscriber station by means of radio transmission signals, and wherein the radio

transmission signals are concentrated in air from a point-to-multipoint system (see Fig. 1, and col.5, line 33-40, Transmitter 12 is concentrated in air from a point to multipoint).

Regarding claims 31: Sereno further disclosed the telecommunication system according to claim 17, wherein interface for speech communication are present at the subscriber stations (see figure 1, and col.3, line 55-57, speech coder (CV1) have input from MF) and output (1) that means interface for speech communication).

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sereno (5,490,136) in view of Struhsaker (6115370).

Regarding to Claim 20, Sereno fails to teach wherein the base station is connected with said at least one base station-router via an interface with V5.2 protocol. However, Struhsaker discloses use of a V5.2 protocol in column 24, lines 31-33. It would have been obvious to one skilled in the art at the time of the invention to use a V5.2 protocol in the system of Sereno. The motivation would be to use a naturally concentrated interface, which is a fundamental requirement of any commercially viable WLL (see Struhsaker, column 24, lines 28-33).

4. Claims 19, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sereno (5,490,136) in view of Struhsaker (6115370) in further view of Tiihonen et al (US Patent No. 6,370,243), hereinafter referred to as Tiihonen.

Regarding to Claim 19: Sereno teaches the telecommunication system according to claim 18. Sereno fails to teach base station-router is operative for dialing via an ISDN primary multiplex connection. However, Tiihonen teaches dialing via an ISDN primary multiplex connection (see col.5, lines 16-19.). It would have been obvious to a

person of ordinary skill in the art to modify Sereno with Tiihonen to enable the use of an ISDN link for a dial up connection. The motivation for this is more bandwidth conservation, and high data rates.

Regarding to claim 22, Sereno fails to teach wherein the separate interface works with V5 protocol. However, Struhsaker discloses use of a V5.2 protocol in column 24, lines 31-33. It would have been obvious to one skilled in the art at the time of the invention to use a V5.2 protocol in the system of Sereno. The motivation would be to use a naturally concentrated interface, which is a fundamental requirement of any commercially viable WLL (see Struhsaker, column 24, lines 28-33).

Regarding to Claim 23: Sereno discloses the telecommunication system according to claim 17. Sereno fails to explicitly disclose wherein the variable transmission rate between the base station and each subscriber station varies in steps of 64 kbit/s. However, Tiihonen explicitly discloses the variable transmission rate between the base station and each subscriber station varies in steps of 64 kbit/s (Tiihonen disclosed as claim 19, inherently ISDN-PM is 64 kbit/s and can set up of step of 64 kbits, see also column 1, lines 54-63). It would have been obvious to a person of ordinary skill in the art to combine Sereno with Tiihonen, so that the subscriber station routers connect via a connection network at variable rate with the base station. The motivation for this is to improve its support for data connections using normal telephone network operation control commands without any complex changes in system or software.

5. Claims 24-25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sereno (5,490,136) in view of Struhsaker (6115370) in further view of Ginzboorg et al (US Patent No. 6,240,091), hereinafter referred to as Ginzboorg.

Regarding to Claim 24-25, and 27-30: Sereno teaches the telecommunication system according to claim 17. Sereno fails to teach wherein said at least one base station-router has several 2 Mbit/s interfaces and/or an Ethernet interface to an external communication network (claim 24. and 30), and data is transmitted between the base station and each subscriber station; by means of the G.704 general structure of the International Telecommunication Union (claim 25), via a light-wave conductor (claim 27), via an HDSL-connection (claim 28), via a synchronous digital hierarchy connection (claim 29). However, Ginzboorg teaches 2 Mbit/s interfaces and/or an Ethernet interface (claim 24, and 30 see column 1, lines 53-67 for 2 Mbits/s interface, or see column 3, lines 10-23 for Ethernet interface), the G.704 (claim 25 see col. 2, and line 1-3.), via a light-wave conductor, via a synchronous digital hierarchy connection (claim 27, and 29 see col. 2, and line 1-3, synchronous digital hierarchy connection (SDH) is light-wave conductor), via an HDSL-connection (claim 28 see column 1, line 15-67). It would have been obvious to a person of ordinary skill in the art to modify Sereno with Ginzboorg to enable the use of a maximum capacity data connection. The motivation for this is to provide higher information transfer rate for the telecommunication between base station and subscriber stations.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L. Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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7/11/2006

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